

**Lake Superior Binational Program • Lakewide Management Plan
Ecosystem Goals
Draft for Public Comment**

Goal #	SUB-GOAL	Other strategic outcomes achieved	Goal type*
1	<u>Strategic Outcome # 1: Diverse, healthy and self-sustaining native plant and animal communities exist in the Lake Superior basin.</u>		
	Identify and restore native communities where they are degraded.		IG, S
	Subgoal Inventory and assess impacts to degraded habitats and communities.	2	
	Subgoal Develop and distribute GIS information on ecosystem types, conditions and trends, including coastal wetlands and riparian acres, and identify where restoration can occur.		
	Subgoal Develop and put into place a policy that results in zero loss of wetland acres and function.		
2	Subgoal Restore 25% of degraded wetland acres in the Lake Superior Basin.		IG, S
	Subgoal Restore or protect 25% of riparian conifer forest acres in the Lake Superior Basin.		
	Identify and protect a system of representative, high quality ecosystems.		
	Subgoal Complete comprehensive, systematic biological surveys in the watershed to identify remaining high-quality natural communities.	2, 8	
	Subgoal Engage landowners as partners in protecting important habitat.		
3	Subgoal Use special designations to protect important habitat on public lands and waters.		
4	Maintain existing genetic diversity and population integrity.		
4	Manage the harvest of plant and animal resources to ensure diverse, healthy, and self-sustaining native plant and animal communities.		
<u>Strategic Outcome #2: A program is in place to monitor the abundance, distribution, and health of plant and animal populations and communities in the Lake Superior basin.</u>			
1	Institute a long-term Lake Superior basin-wide program to monitor ecosystem health utilizing standardized methodology.	1, 3	M
	Subgoal Explore the development of inventory, monitoring, assessment and reporting tool for the basin and how it might be implemented.		

Subgoal	<p>Develop, test, and implement standardized monitoring protocols, sampling procedures and data handling for ecological indicators to enable Binational Program agencies to report on the status of the basin's ecosystem health.</p> <p>Neotropical Migratory Birds Reptiles and Amphibians Soil Invertebrates Medium-Sized Carnivores Fish and aquatic invertebrates Land Use Change Exotic and Invasive Species Rare Resources Culturally Important Resources Over Abundant Species Indicators of Contaminants in the Environment Indicators of Global Climate Change</p>	7	IG P C S
1	Complete comprehensive, systematic biological surveys in the watershed to identify locations of rare plants and animals.	6	
2	Encourage the development and implementation of species recovery plans for species at risk or species of concern.	1	
3	Work with partners to develop a common understanding of native species overabundance, and develop and implement plans to control overabundant species.		
4	Encourage the appropriate use of native species for all projects requiring vegetation restoration.	1	
Subgoal	Develop sources of native plants and seeds in an ecologically appropriate manner throughout the Lake Superior Basin for use in vegetation restoration.		
Subgoal	Establish standards of native species propagation and use as well as definitions of seed zones.		
Subgoal	Develop a list of critical native species that are regionally / habitat specific and ecologically appropriate.		

Strategic Outcome #3: Species at risk or species of concern are recovered if populations are too low, or controlled if populations are too large. Strategic Outcome #4: No further extirpation of native species occurs in the Lake Superior basin.

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5	Subgoal	Educate citizens in the Lake Superior Basin about the importance and appropriate use of local native plants in restoration and landscaping projects.		
		Inventory the extent of exotic, invasive species and implement control measures.		IG
	Subgoal	Complete an inventory and control plan for priority exotic species at the scale of the Lake Superior basin.	6	P
	Subgoal	Encourage all agencies to develop and implement treatment programs for priority species.		S
<u>Strategic Outcome #5: No new non-native species will be introduced into the Lake Superior basin.</u>				
1		Establish and implement best management practices for a range of activities (e.g., forestry, recreation, intra-lake shipping) to prevent the introduction and spread of exotics.	4	P,S
2		Develop a guidance document for agencies' vegetation restoration for projects in the Lake Superior Basin.	6	C
<u>Strategic Outcome #6: Partnerships among natural resource management agencies, environmental agencies, and non-agency stakeholders are strengthened and broadened.</u>				
1		Develop information and educational material to assist local land use decision makers in implementing Binational Program goals through land use planning.	9	C
	Subgoal	Have a Binational Program educator on staff to present material to local governments and decision makers highlighting linkages between land use and ecosystem health.		C
2		Support appropriate public and technical fora to provide opportunities for researchers, resource managers and the public to exchange information.	8	C
3		Inform and educate senior decision makers about how their actions move the Lake Superior basin toward "A Vision for Lake Superior."		C
	Subgoal	Develop a communications plan.		
	Subgoal	Implement the communications plan.		
4		Complete a film about Lake Superior.		C

Strategic Outcome #7: Human activities in the Lake Superior basin mitigate the contribution of greenhouse gases to the environment. Ongoing climate change adaptive management strategies are pursued in the Lake Superior basin.

1	Understand the impacts of climate change and the limits to the ability to predict and model these impacts on specific ecosystems and local regions.			IG
	Subgoal Continue to refine climate change models so as to develop specific predictions for the Lake Superior Basin.			
	Subgoal Develop model projections of changing water levels for Lake Superior.			
	Subgoal Model impacts on wetlands and other habitat types under future water level regimes for 20 years, 50 years, 75 years, and 100 years in the future.			
	Subgoal Predict changes to terrestrial and aquatic ecosystems based on climate change predictions.			
	Subgoal Develop predictions of the impacts of climate change on keystone biota in the lake and the basin as a whole.			
2	Review and revise Conservation and Restoration Plans in the basin as required based on the climate scenarios developed in the goal above.	1		P
3	Help the Lake Superior Basin stakeholders adapt to climate change impacts.			
	Subgoal Help stakeholders to adapt to climate change impacts by facilitating assessment of infrastructure vulnerabilities and capacity.			
4	Make Lake Superior a net carbon reduction area that reduces greenhouse gas emissions.			S
	Subgoal Facilitate basin collaboration on activities to reduce carbon emissions.			
	Subgoal Encourage governments around the basin to set greenhouse gas emission reduction targets.			
	Subgoal Encourage US cities to sign onto the US mayors climate protection agreement.			
<u>Strategic Outcome #8: An interagency effort to restore and protect important habitat will be organized and initiated. Strategic Outcome #9: Management in the Lake Superior basin is organized and implemented at appropriate watershed scales.</u>				
1	Support the development and implementation of ecologically based integrated watershed management plans for priority watersheds within the Lake Superior Basin.	1, 2		P, S
	Subgoal Identify watersheds that have existing watershed plans.			
	Subgoal Develop a list of watersheds that need a new or revised plan.			

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	Subgoal	Prioritize watershed list.		
		Work with local governments/groups to develop watershed plans for 25% of the		
	Subgoal	highest priority watersheds in need of a new or revised plan.		
		Work with local governments/groups to develop watershed plans for 50% of the		
	Subgoal	highest priority watersheds in need of a new or revised plan.		
		Work with local government/groups to develop watershed plans for 75% of the		
	Subgoal	highest priority watersheds in need of a new or revised plan.		
		Work with local governments/groups to develop watershed plans for 100% of the		
2	Subgoal	highest priority watersheds in need of a new or revised plan.		
		Develop and maintain a unified, binational GIS database that includes current		
		basin-wide data and decision support models needed for watershed management		
		at a scale and in a format that supports Lake Superior Basin planning and		
		watershed management.	6	IG, P
	Subgoal	Develop formal agreements for data sharing, participation and support.		
	Subgoal	Establish a mechanism to maintain shareable data once collected.		
		<u>Strategic Outcome # 10: Air and water quality are restored and protected and</u>		
		<u>soils are conserved.</u>		
1		Restore and maintain natural hydrologic processes, including groundwater.		
2		Eliminate contaminants at levels that impact plants and animals, including		
		humans.	3	
3		Protect oligotrophic conditions in nearshore and offshore waters and restore and		
		protect water quality in embayments and tributaries.		

* Goal Types

(P) - Planning

(M) - Monitoring

(IG) - Information Gathering

(S) - Stewardship

(C) - Communications